CHAFF ON THE RECEPTACLE OF SOLIDAGO JUNCEA[1, 2]

GARY H. MORTON

While critically analyzing a population sample of *Solidago* from an old field in Bucks Co., Pennsylvania, I noticed that some of the specimens had chaffy receptacles. This character is contrary to the genus description in both of the manuals that pertain to the plants of Northeastern United States. Cronquist, in Gleason (1952), describes the receptacles as, ". . . small, flat or a little convex, naked, alveolate, in a few species becoming fimbrillate." Fernald, in Gray's Manual (1950), says the receptacles are, ". . . small, not chaffy."

[1]I am grateful to Arthur Cronquist for his helpful suggestions after reading the manuscript. Work on this paper was carried out with the support of a Title IV NDEA fellowship.

[2]Contribution from the Botanical Laboratory, The University of Tennessee, N. Ser. 307.

It is hard to understand why this character has not been previously reported. One possible explanation is that the receptacle is small. In dry material the chaff readily separates from the receptacle while removing the flowers. This result produces the appearance of a naked receptacle. If one is careful, however, it is possible to remove a disk flower and have chaff remain clasping to the base of the achene as in figure 1-A. The character is best seen by observing a young head. The chaff will protrude through and above the flowers as in figure 1-B. When a comparison with the innermost series of phyllaries is made, the chaff is seen to be very similar in size and texture, but the lower one-half of it is more or less conduplicate, while that of the phyllaries is more or less flat.

The group of specimens with chaffy receptacles were keyed to *Solidago juncea* Ait. Material labeled *S. juncea* in the herbarium of the University of Tennessee was checked and it was found to possess chaff.

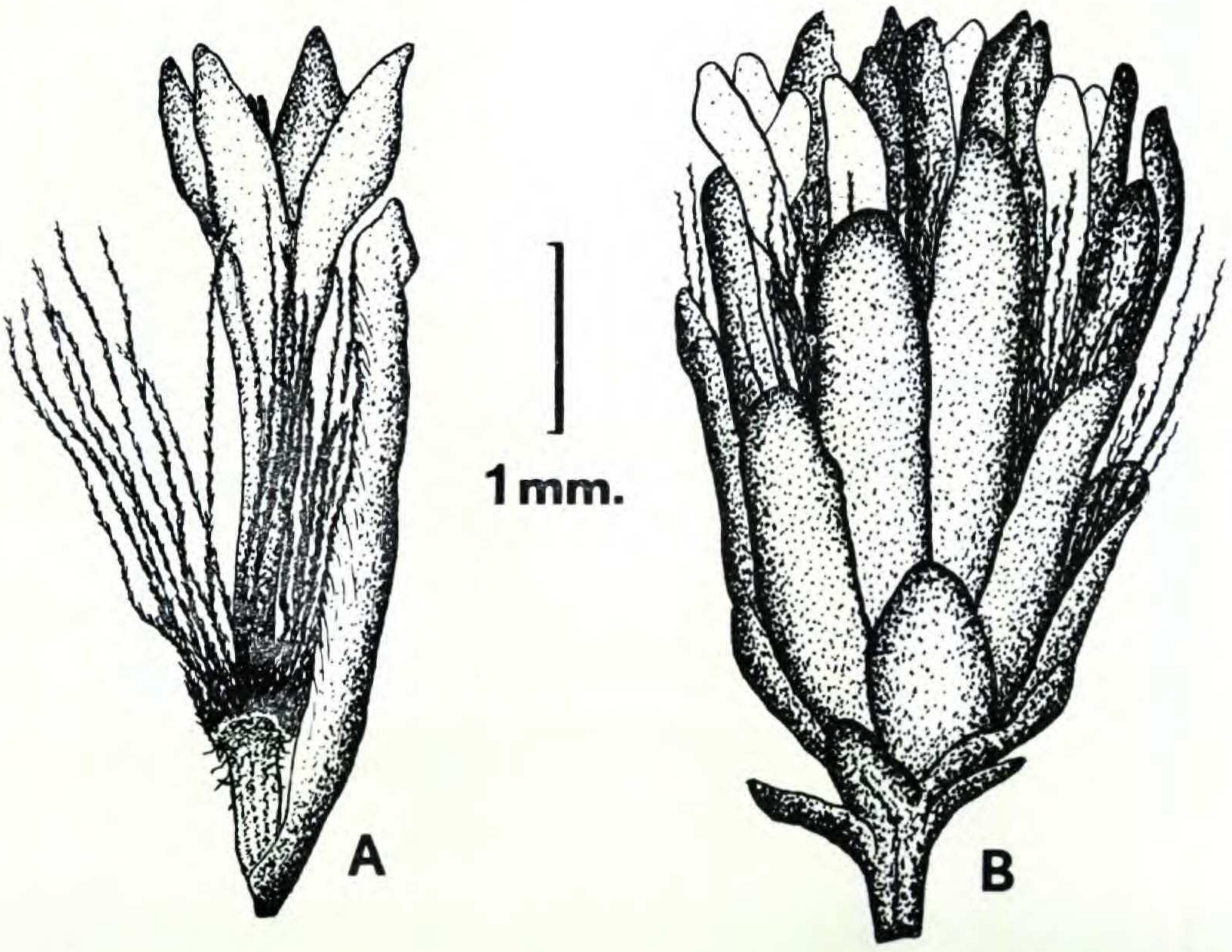

Figure 1. *Solidago juncea* Ait. A — Dissected disk flower with chaff clasping the base of the achene. B — Young head with the chaff protruding through and above the flowers.

Selected voucher specimens supporting this study are the following from the University of Tennessee Herbarium. ONTARIO: Bruce Peninsula, *R. V. Krotkov 9540*. MAINE: Knox Co., *Ray C. Friesner 6182*. NEW HAMPSHIRE: Cheshire Co., *Foster Batchelder*. MASSACHUSETTS: Norfolk Co., *Robert A. Ware 3195*. NEW YORK: Albany Co., *Norman H. Russell n817539*. PENNSYLVANIA: Butler Co., *Norman H. Russell NR-2700*. MARYLAND: Montgomery Co., *Thos. Kearney, Jr.* VIRGINA: Spotsylvania Co., *H. H. Iltis 2317*. KENTUCKY: Jefferson Co., *Charles R. Gunn J-194*. INDIANA: Knox Co., *Ray C. Friesner*

54,333. ILLINOIS: Kankakee Co., *Alfred C. Koelling 166*. The figures were drawn from my personal material. PENNSYLVANIA: Bucks Co., *G. Morton 892*.

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LITERATURE CITED

FERNALD, M. L. 1950. Gray's Manual of Botany, 8th edition.
GLEASON, H. A. 1952. The New Britton and Brown Illustrated Flora of the Northeastern United States and Adjacent Canada.

THE STATUS OF HEDYOTIS PROCUMBENS VAR. HIRSUTA (RUBIACEAE)

ROBERT L. WILBUR[1]

The species *Hedyotis procumbens* (Walt. ex Gmel.) Fosberg (*Houstonia procumbens* (Gmel.) Standley or *Houstonia rotundifolia* Michx.) is a low, creeping somewhat fleshy, heterostylous, perennial herb found along the outer coastal plain from South Carolina south throughout most of peninsular Florida and as far west as eastern Louisiana. It would be noteworthy indeed if any reasonably wide-ranging taxon were found to be completely uniform and this little herb is not in this regard exceptional. For example the leaves vary from narrowly oblanceolate or spatulate to broadly suborbicular but as far as is known differences in neither geography nor ecology are correlated with this morphological variation. Another conspicuous morphologic variable is in vestiture since individuals are either glabrous or very nearly so to so densely hirsutulous as to appear noticeably shaggy upon close inspection. This variation in pubescence has been pointed

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